

# Notice of Allowability

Application No.

10/019,370

Examiner

Dixomara Vargas

Applicant(s)

KISELEV ET AL.

Art Unit

2859

*mv*

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 02/27/04.
2. ☒ The allowed claim(s) is/are 22-37 and 39-42.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☒ to Paper No./Mail Date 05/30/03.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## DETAILED ACTION

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
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Authorization for this examiner's amendment was given in a telephone interview with James M. Olsen on May 7, 2004.

The application has been amended as follows:

Replace claims 22, 24 and 25 as follows:

Claim 22:

22. A computer-implemented system for analyzing nuclear magnetic resonance data, wherein the data contains at least one relaxation signal of a sample, the system comprising: at least one analyzing means that separates the nuclear magnetic resonance data into at least two parts that are differently dependent on an echo time  $T_E$  and calculates a statistical fluctuation of a noise signal g.
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Claim 24:

24. A nuclear magnetic resonance tomograph comprising: computer-implemented system to analyze nuclear magnetic resonance data, wherein the data contains at least one relaxation signal

of a sample, said computer-implemented system including at least one analyzing means that separates the data into at least two parts that are differently dependent on an echo time  $T_E$  and calculates a statistical fluctuation of a noise signal  $g$ .

Claim 25:

25. A computer-implemented method for analyzing nuclear magnetic resonance data, wherein the data contains at least one relaxation signal of a sample, the method comprising:  
separating the nuclear magnetic resonance data into at least two parts that are differently dependent on an echo time  $T_E$ ; and calculating a statistical fluctuation of a noise signal  $g$ .

***Drawings***

2. The drawings filed on 11/13/01 are acceptable subject to correction of the informalities indicated on the "Notice of Draftsperson's Patent Drawing Review," PTO-948 of the office action mailed on 05/30/03. In order to avoid abandonment of this application, correction is required in reply to the Office action. New formal drawings are requested. The correction will not be held in abeyance.

***Allowable Subject Matter***

3. Claims 22-37 and 39-42 are allowed.
4. The following is an examiner's statement of reasons for allowance:
- a. With respect to claim 1, the claim has been found allowable over the prior art because the prior art fails to teach or fairly suggest a computer-implemented system for

analyzing nuclear magnetic resonance data, wherein the data contains at least one relaxation signal of a sample, the system comprising: an analyzing means that calculates a statistical fluctuation of a noise signal  $g$  in combination with the remaining limitations of the claim.

b. With respect to claim 24, the claim has been found allowable over the prior art because the prior art fails to teach or fairly suggest a NMR tomograph comprising: an analyzing means that calculates a statistical fluctuation of a noise signal  $g$  in combination with the remaining limitations of the claim.

c. With respect to claim 25, the claim has been found allowable over the prior art because the prior art fails to teach or fairly suggest a computer-implemented method to analyze NMR data wherein the data contains at least one relaxation signal of a sample, the method comprising the step of calculating a statistical fluctuation of a noise signal  $g$  in combination with the remaining limitations of the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

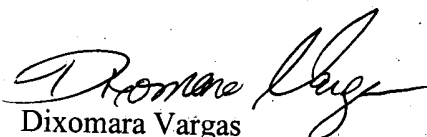
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dixomara Vargas whose telephone number is (571) 272-2252.

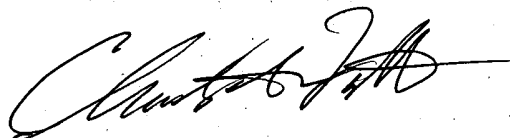
The examiner can normally be reached on 8:00 am. to 4:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dixomara Vargas  
Art Unit 2859  
May 7, 2004



Diego Gutierrez  
Supervisory Patent Examiner  
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**CHRISTOPHER W. FULTON**  
**PRIMARY EXAMINER**